



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/044,555	01/11/2002	Thomas Michael Anderson	CE04890N	9501
23330	7590	07/01/2010		
MOTOROLA, INC. LAW DEPARTMENT 1303 E. ALGONQUIN ROAD SCHAUMBURG, IL 60196			EXAMINER WASEL, MOHAMED A	
			ART UNIT 2454	PAPER NUMBER
			NOTIFICATION DATE 07/01/2010	DELIVERY MODE ELECTRONIC

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

DOCKETING.US@MOTOROLA.COM

UNITED STATES PATENT AND TRADEMARK OFFICE

---

BEFORE THE BOARD OF PATENT APPEALS  
AND INTERFERENCES

---

*Ex parte* THOMAS MICHAEL ANDERSON, RUSSEL RAY RUSTAD,  
LEE MICHAEL ESTEP, IN SIK PARK  
and JORGE FRANCISCO GONZALEZ

---

Appeal 2009-005731  
Application 10/044,555  
Technology Center 2400

---

Decided: June 30, 2010

---

Before KENNETH W. HAIRSTON, JOHN C. MARTIN  
and CARL W. WHITEHEAD, JR., *Administrative Patent Judges*.

HAIRSTON, *Administrative Patent Judge*.

DECISION ON APPEAL

This is an appeal under 35 U.S.C. §§ 6(b) and 134 from the final rejection of claims 1 to 17. We will reverse.

The disclosed invention relates to a method and system for enabling a controlling software component to communicate on a discrete basis with one

or more of a plurality of processor-enabled peripheral devices over a controller area network (CAN) bus (Fig. 1; Spec. 2, 5-9, 14, and 15; Abstract).

Claim 1 is representative of the claims on appeal, and it reads as follows:

1. A method of communicating over a controller area network (CAN) bus, comprising:

routing registration information from a plurality of processor-enabled peripheral devices to a controlling software component;

routing a periodic heartbeat message from the controlling software component to the plurality of processor-enabled peripheral devices to enable each of the plurality of processor-enabled peripheral devices to maintain its registered status; and

if necessary, routing messages from the controlling software component to one or more of the plurality of processor-enabled peripheral devices on a discrete basis over the CAN bus to control the one or more of the plurality of processor-enabled peripheral devices.

The prior art<sup>1</sup> relied upon by the Examiner in rejecting the claims on appeal is:

Dea	US 5,742,833	Apr. 21, 1998
Goodman	US 2002/0097720 A1	July 25, 2002

The Examiner rejected claims 1 to 17 under 35 U.S.C. § 103(a) based upon the teachings of Dea and Goodman.

---

<sup>1</sup> The filing date of the Goodman reference is presumed to be prior to the filing date of the subject application.

Dea describes a method and system for reducing power consumption in a computer network by monitoring various systems in the network. A link beat pulse is used to periodically poll the stations on the network to sense for a heartbeat (i.e., sense whether the stations are on the network and remain operative) (Figs. 1-4; col. 3, ll. 1 to 53; col. 7, ll. 42-60). The network can operate on the Ethernet (Fig. 5; col. 3, ll. 52-55; col. 4, ll. 23-27; col. 6, ll. 7-12; col. 7, ll. 36-42).

The Examiner acknowledges (Final Rej. 2) that “Dea fails to explicitly teach devices [that] communicate over a controller area network (CAN) bus.”

According to the Examiner (Final Rej. 2) “Goodman discloses devices [that] communicate over a controller area network (CAN) bus (*Paragraph [0004], [0028]*).”

Goodman describes a plurality of nodes 38-44 in a storage library system 20 that communicate with each other over a CAN bus 46 using a CAN message protocol (Figs. 1, 2; ¶ 0028). Each of the nodes 38-44 includes a CAN object 52a-d that is capable of transmitting messages to nodes on the CAN interface using a network protocol (e.g., Ethernet) (Fig. 3; ¶ 0036).

Based upon the CAN bus teachings of Goodman, the Examiner concludes (Final Rej. 3) that it would have been obvious to one of ordinary skill in the art “to combine the teachings of Dea and Goodman because it provides an optimized way of transferring data and power between computer system hardware components.”

Appellants argue *inter alia* (App. Br. 9) that although Dea and Goodman each describe portions of the claimed invention, “[t]he similarities between Dea and Goodman are not strong enough to produce the claimed routing of registration messages to peripheral devices on the CAN bus, routing of heartbeat messages on the CAN bus and the routing of messages on a discrete basis over the CAN bus to control peripheral devices.”

Based upon the foregoing, we have to determine whether the Examiner erred by finding that it would have been obvious to the skilled artisan to combine the teachings of the applied references for the advantage of “an optimized way of transferring data and power between computer system hardware components.”

Although Dea describes the use of a periodic heartbeat pulse to poll stations in a network, Goodman describes the use of a CAN bus to connect a nodal network, and both references describe use of the Ethernet, we agree with Appellants’ argument (App. Br. 8, 9) that the skilled artisan would have to resort to “impermissible hindsight reconstruction based on Applicants’ own teachings” to arrive at the specifically claimed registration of the plurality of processor-enabled peripheral devices with the controlling software component as set forth in claims 1 to 11, the periodic heartbeat message sent from the controlling software component to the plurality of processor-enabled peripheral devices to enable each of the peripheral devices to maintain its registered status as set forth in claims 1 to 11, and the messages routed from the controlling software component to one or more of the peripheral devices on a discrete basis on the CAN bus to control the one or more peripheral devices as set forth in claims 1 to 17.

In summary, the Examiner erred in finding that the skilled artisan would have combined the disparate teachings of the applied references for the advantage of “an optimized way of transferring data and power between computer system hardware components” because only Appellants teach how to arrive at the claimed invention set forth in claims 1 to 17. Thus, the obviousness rejection of claims 1 to 11 is reversed because we agree with Appellants that the Examiner’s articulated reasons for modifying the teachings of the reference to Dea with the teachings of Goodman do not support a legal conclusion of obviousness. *KSR Int’l v. Teleflex, Inc.*, 550 U.S. 398, 418 (2007).

In summary, the decision of the Examiner is reversed.

REVERSED

KIS

MOTOROLA, INC.  
LAW DEPARTMENT  
1303 E. ALGONQUIN ROAD  
SCHAUMBURG IL 60196